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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,801	03/10/2004	Edward Glazowski	3348-4019US1	7128
27123	7590	04/22/2005	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			DUPUIS, DEREK L	
			ART UNIT	PAPER NUMBER
			2883	

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/798,801

Applicant(s)

GLAZOWSKI ET AL.

Examiner

Derek L. Dupuis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because many of the features and reference numbers are difficult to read. For example, many of the features in figures 2, 5, and 6 are difficult to discern. Also, many of the hand-written reference numbers are difficult to read and distinguish. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***Specification***

2. The disclosure is objected to because of the following informalities: the phrase "presents the greatest of risk of damage" in lines 14 and 15 of page 2 should apparently be "presents the greatest risk of damage". The phrase "on each of mating connectors" in line 19 of page 2 should apparently be "on each of the mating connectors". The word "accordingly" in line 4 of page 4 should apparently be "according". The word "lineal" in line 4 of page 8 should apparently be "linear". Appropriate correction is required.

### ***Claim Objections***

3. Claim 1 is objected to because of the following informalities: the limitation "the receptacle" in line 18 should apparently be "the receptacle ferrules". Appropriate correction is required. For the purpose of examination, the examiner has concluded that this limitation was

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intended to refer to the ferrules because according to the specification and the drawings, the shutter exposes the ferrules, not the entire receptacle.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 1 recites the limitation "the connector aperture" in line 15. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination, the examiner has concluded based on the specification and the drawings that "the connector aperture" refers to an aperture in the connector body that houses the connector ferrule.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-15 and 17-22 rejected under 35 U.S.C. 103(a) as being unpatentable over ***Lu (US 2001/0043777)***.

9. Regarding claims 13, and 17, Lu teaches a fiber optic termination assembly as shown in figures 10-27. The assembly includes a connector body (12') with a fiber optic ferrule-supporting structure within the connector body as shown in figures 10 and 11. A fiber optic

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terminating ferrule (13') for a fiber optical cable (62') is presented to the forward end of the connector. The assembly also includes a receptacle body (14') with a fiber optic ferrule-supporting structure as shown in figures 21 and 22. When a second connector is inserted at the other end of the receptacle, the receptacle presents a fiber optic terminating ferrule for a fiber optical cable (see figures 15 and 16). The ferrule presented in the receptacle and the ferrule of the connector are axially aligned and mated so as to establish a light-transmitting optical path as shown in figures 15 and 16. The connector body and the receptacle body each include an aperture in the end of the connector body and the receptacle body, respectively (see figures 15 and 16). The connector also comprises a connector shutter (66') as shown in figures 10 and 11. The connector shutter is supported by the connector body and is rotatable between a closed position (figure 11), wherein the shutter covers the connector ferrule, and an open position (figure 10), wherein the shutter exposes the connector ferrule. The shutter rotates between the two positions which open and close the connector aperture as shown by figures 10 and 11. The receptacle also comprises a receptacle shutter (38') that is supported by the receptacle body. The receptacle shutter is rotatable between a closed position, wherein the shutter covers the receptacle ferrule, and an open position, wherein the shutter exposes the receptacle ferrule (see figures 23-27). The connector and receptacle shutters move from their closed positions to their open positions upon joining of the connector and the receptacle as is shown in figures 23-27. The connector body is received by the receptacle body and the connector body is configured to actuate the receptacle shutter (see figures 23-27) and to establish a fiber optic connection within the receptacle (see figures 15 and 16).

10. Regarding claims 2, 4-15, and 18-22, Lu teaches a fiber optic connector assembly as discussed above in reference to claims 1, 3, and 17 respectively. Lu also teaches that both the connector shutter and the receptacle shutter are pivotally attached to their respective bodies (see figures 23-27). The receptacle shutter pivots from the closed position to the open position in a direction that is towards the interior of the receptacle body as shown in figures 23-27. The connector shutter pivots from the closed position to the open position in a direction that is away from the interior of the receptacle body as shown in figures 23-27. Both shutters are biased in the closed positions when the connector body is not joined with the receptacle body. The connector shutter includes a camming surface (68') that contacts a receptacle camming surface (46') on a bottom wall that results in the connector shutter to pivotally rotate (see figures 23-27). The receptacle aperture is contoured to correspond to a leading edge of the connector body as shown by the grooves (64') of the connector body and the corresponding guide rails (42') of the receptacle body. The receptacle body is formed to accept the connector body with the connector shutter biased in the open position as shown in figures 15, 16, and 23-27. The receptacle includes a connector shutter recess area as shown in figure 27.

11. Lu does not teach that the connector and receptacle ferrule-supporting structure present a plurality of ferrules for a multi-fiber optical cable. However, it would have been obvious to one of ordinary skill in the art at the time of invention to use the connector and receptacle assemblies of Lu for multi-fiber optical cables with a plurality of ferrules since it has been held that the mere duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

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12. Claims 16 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Lu (US 2001/0043777)* as applied to claims 1-15 and 17-22 above, and further in view of *Lampert et al (US 2002/0081076 A1)*.

13. Regarding claims 16, Lu teaches a fiber optic connector assembly as discussed above in reference to claim 3. Lu does not teach that the receptacle body includes a switch that is connected to an opto-electronic device. Lampert et al teach an optical connector assembly shown in figure 5 where an optical fiber cable is coupled with an opto-electronic device (namely, an LED). The connector assembly includes a detector in the receptacle body that switches power to the opto-electronic device (see paragraphs 7-9, 33, and 34).

14. Regarding claims 23-25, Lu teaches a fiber optic connector assembly as shown in figures 10-27. The assembly comprises a connector body (12'), a receptacle body (14'), wherein each of the connector body and the receptacle body includes an aperture in an end thereof as shown in figures 10, 13, 21, and 22. The connector body and the receptacle body are configured so that they may be engaged together and disconnected. Lu does not teach that receptacle body includes a detector device that activates a power supply connected to an opto-electronic device or that the detector device activates the power supply when the connector body and the receptacle body are connected or that the detector device deactivates the power supply when the two bodies are disconnected. Lampert et al teach an optical connector assembly shown in figure 5 where an optical fiber cable is coupled with an opto-electronic device (namely, an LED). The connector assembly includes a detector in the receptacle body that activates a power supply of the opto-electronic device (see paragraphs 7-9, 33, and 34). The detector activates the power supply when it senses that a connection between the connector body and the receptacle body and it deactivates

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the power supply upon sensing a disconnection of the connector body and the receptacle body (see paragraphs 7-9, 33, and 34).

15. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the optical connector assembly of Lu by including a detector device in the receptacle body to turn on an opto-electronic device when the receptacle is connected to a connector body and to turn off an opto-electronic device when the receptacle is disconnected from a connector body as taught by Lampert et al. Motivation to do this would have been to create a "safety switch to prevent light from emanating from an open adapter".

#### *Conclusion*

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. *Marazzi et al (US 5,363,460)* teach an optical fiber connection assembly with shutters for both a connector body and a receptacle body.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derek L. Dupuis whose telephone number is (571) 272-3101. The examiner can normally be reached on Monday - Friday 8:30am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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